

YEDA 023 PCT.ST25.txt
SEQUENCE LISTING

<110> Yeda Research and Development Co. Ltd.

<120> CD25 DNA VACCINES FOR TREATING AND PREVENTING T-CELL MEDIATED DISEASES

<130> YEDA/023 PCT

<160> 11

<170> PatentIn version 3.3

<210> 1

<211> 2308

<212> DNA

<213> Homo sapiens

<400> 1

gagagactgg atggaccac aaggggtgaca gcccaggcgg accgatcttc ccatcccaca	60
tcctccggcg cgatgccaaa aagaggctga cggcaactgg gccttctgca gagaaagacc	120
tccgcttcac tgccccggct ggtcccaagg gtcaggaaga tggattcata cctgctgatg	180
tggggactgc tcacgttcat catggtgcct ggctgccagg cagagctctg tgacgatgac	240
ccgccagaga tcccacacgc cacattcaaa gccatggcct acaaggaagg aaccatgttg	300
aactgtgaat gcaagagagg tttccgcaga ataaaaagcg ggtcactcta tatgctctgt	360
acaggaaact ctagccactc gtcctgggac aaccaatgtc aatgcacaag ctctgccact	420
cggaacacaa cgaaacaagt gacacctcaa cctgaagaac agaaagaaag gaaaaccaca	480
gaaatgcaaa gtccaatgca gccagtggac caagcgagcc ttccagggtca ctgcagggaa	540
cctccaccat gggaaaatga agccacagag agaatttatc atttcgtggt ggggcagatg	600
gtttattatc agtgcgtcca gggatacagg gctctacaca gaggtcctgc tgagagcgtc	660
tgcaaaatga cccacgggaa gacaagggtg acccagcccc agctcatatg cacaggtgaa	720
atggagacca gtcagtttcc aggtgaagag aagcctcagg caagccccga aggccgtcct	780
gagagtgaga cttcctgcct cgtcacaaca acagattttc aaatacagac agaaatggct	840
gcaaccatgg agacgtccat atttacaaca gagtaccagg tagcagtggc cggctgtgtt	900
ttcctgctga tcagcgtcct cctcctgagt gggctcacct ggcagcggag acagaggaag	960
agtagaagaa caatctagaa aaccaaaaaga acaagaattt cttggtaaga agccgggaac	1020
agacaacaga agtcatgaag cccaagtga atcaaagggtg ctaaatggtc gccaggaga	1080
catccgttgt gcttgctctg gttttggaag ctctgaagtc acatcacagg acacggggca	1140
gtggcaacct tgtctctatg ccagctcagt cccatcacag agcgagcgct acccacttct	1200
aaatagcaat ttcgccgttg aagaggaagg gcaaaaccac tagaactctc catcttattt	1260
tcatgtatat gtgttcatta aagcatgaat ggtatggaac tctctccacc ctatatgtag	1320
tataaagaaa agtaggttta cattcatctc attccaactt cccagttcag gagtcccaag	1380
gaaagcccca gcactaacgt aaatacacia cacacacact ctaccctata caactggaca	1440
ttgtctgcgt ggttcctttc tcagccgctt ctgactgctg attctcccgt tcacgttgcc	1500

Page 1

YEDA 023 PCT.ST25.txt

```

taataaacat ccttcaagaa ctctgggctg ctaccacagaa atcattttac ccttgggtca 1560
atcctctaag ctaaccccct tctactgagc cttcagtctt gaatttctaa aaaacagagg 1620
ccatggcaga ataatctttg ggtaacttca aaacggggca gccaaacca tgaggcaatg 1680
tcaggaacag aaggatgaat gaggtcccag gcagagaatc atacttagca aagttttacc 1740
tgtgcgttac taattggcct ctttaagagt tagtttcttt gggattgcta tgaatgatac 1800
cctgaatttg gcctgcacta atttgatgtt tacagggtga cacacaagggt gcaaatcaat 1860
gcgtacgttt cctgagaagt gtctaaaaac accaaaaagg gatccgtaca ttcaatgttt 1920
atgcaaggaa ggaaagaaag aaggaagtga agagggagaa gggatggagg tcacactggt 1980
agaacgtaac cacggaaaag agcgcatcag gcctggcacg gtggctcagg cctataaccc 2040
cagctcccta ggagaccaag gcgggagcat ctcttgaggc caggagtttg agaccagcct 2100
gggcagcata gcaagacaca tccctacaaa aaattagaaa ttggctggat gtggtggcat 2160
acgcctgtag tcctagccac tcaggaggct gaggcaggag gattgcttga gcccaggagt 2220
tcgaggctgc agtcagtcac gatggcacca ctgcactcca gcctgggcaa cagagcaaga 2280
tcctgtcttt aaggaaaaaa agacaagg 2308

```

<210> 2
 <211> 272
 <212> PRT
 <213> Homo sapiens

<400> 2

```

Met Asp Ser Tyr Leu Leu Met Trp Gly Leu Leu Thr Phe Ile Met Val
1          5          10          15

Pro Gly Cys Gln Ala Glu Leu Cys Asp Asp Asp Pro Pro Glu Ile Pro
          20          25          30

His Ala Thr Phe Lys Ala Met Ala Tyr Lys Glu Gly Thr Met Leu Asn
          35          40          45

Cys Glu Cys Lys Arg Gly Phe Arg Arg Ile Lys Ser Gly Ser Leu Tyr
          50          55          60

Met Leu Cys Thr Gly Asn Ser Ser His Ser Ser Trp Asp Asn Gln Cys
          65          70          75          80

Gln Cys Thr Ser Ser Ala Thr Arg Asn Thr Thr Lys Gln Val Thr Pro
          85          90          95

Gln Pro Glu Glu Gln Lys Glu Arg Lys Thr Thr Glu Met Gln Ser Pro
          100          105          110

Met Gln Pro Val Asp Gln Ala Ser Leu Pro Gly His Cys Arg Glu Pro
          115          120          125

```

YEDA 023 PCT.ST25.txt

Pro Pro Trp Glu Asn Glu Ala Thr Glu Arg Ile Tyr His Phe Val Val
 130 135 140

Gly Gln Met Val Tyr Tyr Gln Cys Val Gln Gly Tyr Arg Ala Leu His
 145 150 155 160

Arg Gly Pro Ala Glu Ser Val Cys Lys Met Thr His Gly Lys Thr Arg
 165 170 175

Trp Thr Gln Pro Gln Leu Ile Cys Thr Gly Glu Met Glu Thr Ser Gln
 180 185 190

Phe Pro Gly Glu Glu Lys Pro Gln Ala Ser Pro Glu Gly Arg Pro Glu
 195 200 205

Ser Glu Thr Ser Cys Leu Val Thr Thr Thr Asp Phe Gln Ile Gln Thr
 210 215 220

Glu Met Ala Ala Thr Met Glu Thr Ser Ile Phe Thr Thr Glu Tyr Gln
 225 230 235 240

Val Ala Val Ala Gly Cys Val Phe Leu Leu Ile Ser Val Leu Leu Leu
 245 250 255

Ser Gly Leu Thr Trp Gln Arg Arg Gln Arg Lys Ser Arg Arg Thr Ile
 260 265 270

<210> 3
 <211> 21
 <212> PRT
 <213> Artificial

<220>
 <223> synthetic peptide derived from CD25

<400> 3

Thr Thr Asp Thr Gln Lys Ser Thr Gln Ser Val Tyr Gln Glu Asn Leu
 1 5 10 15

Ala Gly His Cys Arg
 20

<210> 4
 <211> 20
 <212> PRT
 <213> Artificial

<220>
 <223> synthetic peptide derived from CD25

<400> 4

Ala Ser Glu Glu Ser Gln Gly Ser Arg Asn Ser Phe Pro Glu Ser Glu
 1 5 10 15

YEDA 023 PCT.ST25.txt

Ala Cys Pro Thr
20

<210> 5
<211> 20
<212> PRT
<213> Artificial

<220>
<223> synthetic peptide derived from IL2-Rb

<400> 5

Ile Phe Leu Glu Thr Leu Thr Pro Asp Thr Ser Tyr Glu Leu Gln Val
1 5 10 15

Arg Val Ile Ala
20

<210> 6
<211> 20
<212> PRT
<213> Artificial

<220>
<223> synthetic peptide derived from IL-2Rb

<400> 6

Ser Val Asp Leu Leu Ser Leu Ser Val Val Cys Trp Glu Glu Lys Gly
1 5 10 15

Trp Arg Arg Val
20

<210> 7
<211> 20
<212> PRT
<213> Artificial

<220>
<223> synthetic peptide derived from TNFR1

<400> 7

Trp Lys Glu Phe Met Arg Leu Leu Gly Leu Ser Glu His Glu Ile Glu
1 5 10 15

Arg Leu Glu Leu
20

<210> 8
<211> 20
<212> PRT
<213> Artificial

<220>
<223> synthetic peptide derived from p53

<400> 8

YEDA 023 PCT.ST25.txt

Met Thr Ala Met Glu Glu Ser Gln Ser Asp Ile Ser Leu Glu Leu Pro
 1 5 10 15

Leu Ser Gln Glu
 20

<210> 9
 <211> 15
 <212> PRT
 <213> Artificial

<220>
 <223> synthetic prptide derived from HSP65

<400> 9

Glu Glu Ser Asn Thr Phe Gly Leu Gln Leu Glu Leu Thr Glu Gly
 1 5 10 15

<210> 10
 <211> 1578
 <212> DNA
 <213> Rattus norvegicus

<400> 10
 ggaccgagcc cttgttctgg cattctccca ggaggatgca gaaaaggggc tgaccaaca 60
 ttctgcagag aatttcatcc agttccttcc tgcattcctga tcccacgtgc cagggagatg 120
 gagccacact tgctgatgtt ggggtttctc tcattcacca tagtaccgg ctgttgggca 180
 gagctgtgtc tgtatgaccc accggaggtc cccaatgcca cgttcaaagc cctctcctac 240
 aagaacggca ccattcctaaa ctgtgaatgc aagagagggt tccgaagact gaatgagctg 300
 gtctatatgg cttgtctagg aaactcctgg agcaacaact gtcagtgcac aagcaactcc 360
 catgacaact caagagagca agttacacct caacctgaag gacagaaaga gcaacagacc 420
 acggacacgc agaaatcaac acagtctgtg taccaggaga accttgcagg tcaactgcagg 480
 gagccccctc cttggagaca tgaagacacc aagagaatct accacttcgt ggaaggacag 540
 atagtctctt acacgtgtat tcaaggatac aaggctctac agagaggtcc tgctatcagc 600
 atctgcaaga cagtgtgtgg ggagataagg tggacgcac cccagctcac gtgtgtagat 660
 gaaaaagaac accatcaatt tctggctagt gaagaatctc aaggaagcag aaattctttc 720
 ccagagagtg aggtcttctg tcccaccccc aacacagact tctcacaact cacagaagca 780
 actacaacta tggagacatt cgtgttcaca aaggagtatc aggtagcagt ggccagctgc 840
 atcttctctg tctcagcat cctcctcctg agtgggttca cctggcaaca tagatggagg 900
 aagagcagaa gaaccatcta gcaagctaga acagttggag cccaagggaa gatgatggac 960
 tcatgaagct caagaaacac ctgaggggtc aaacgtgcac tcgacgggtg cctgtctcct 1020
 ttcgatccct cgggtcctgg aaagttatga agtcccagaga cacaatggca catcgggaaa 1080
 tagcaacttc atcactaaac cgaactttcc attgaagaat aggatctgac catttcagtg 1140
 cagcagttct aaagctttaa cgggaggagg ggccaacgg tgcctgtgtg ttttgttttg 1200

YEDA 023 PCT.ST25.txt

tgtacatgtg ttgatgggag ctgcatggt gtggctcactt ttcgtggaac acacaatata	1260
gaaaagttgc tttatgttga cttcttttgg agagcccagc actaatgtaa atactccctc	1320
ctgctcttcc ttcctcttcc tcttctcttc ctcttactc ctcccctggt ccaccacct	1380
gcacccatct acttttcttc ttcctttctg ttctcacaag gtcacccatg gcatcatgta	1440
tggctggctc ctttctcaac ctctgtttgc ctaactgggt ctttggattt catcacttac	1500
tgatcagttt tttaaaactc tgggctgaca atgaggactc catgttttta gaaggaaacc	1560
ccctttccac tgaagctt	1578

<210> 11
 <211> 1623
 <212> DNA
 <213> Mus musculus

<400> 11	
gacacagact acaccagag aaagaagagc aagcaccatg ttgaaactat tattgtcacc	60
tagatccttc ttagtccttc agctgctcct gctgagggca ggggtggagct ccaaggctct	120
catgtccagt gcgaatgaag acatcaaagc tgatttgatc ctgacttcta cagcccctga	180
acacctcagt gctcctactc tgccccttcc agaggttcag tgctttgtgt tcaacataga	240
gtacatgaat tgcacttgga atagcagttc tgagcctcag gcaaccaacc tcacgctgca	300
ctataggtac aaggatatctg ataataatac attccaggag tgcagtcact atttgttctc	360
caaagagatt acttctggct gtcagataca aaaagaagat atccagctct accagacatt	420
tgttgtccag ctccaggacc ccagaaaacc ccagaggcga gctgtacaga agctaaacct	480
acagaatctt gtgatccac gggctccaga aaatctaaca ctgagcaatc tgagtgaatc	540
ccagctagag ctgagatgga aaagcagaca tattaagaa cgctgtttac aatacttgggt	600
gcagtaccgg agcaacagag atcgaagctg gacggaacta atagtgaatc atgaacctag	660
attctccctg cctagtgtgg atgagctgaa acggtacaca ttctgggttc ggagccgcta	720
taaccaatc tgtggaagtt ctcaacagtg gagtaaattg agccagcctg tccactgggg	780
gagtcatact gtagaggaga atccttcctt gtttgactg gaagctgtgc ttatccctgt	840
tggcaccatg gggttgatta ttaccctgat ctttgtgtac tgttggttgg aacgaatgcc	900
tccaattccc cccatcaaga atctagagga tctggttact gaataccaag ggaacttttc	960
ggcctggagt ggtgtgtcta aagggctgac tgagagtctg cagccagact acagtgaacg	1020
gttctgccac gtcagcgaga ttcccccaa aggaggggccc ctaggagagg ggcctggagg	1080
ttctccttgc agcctgcata gcccttactg gcctccccca tgttattctc tgaagccgga	1140
agcctgaaca tcaatccttt gatggaacct gaaagtccta tagtcctaag tgacgctaac	1200
ctcgggtact caccttgga atctggatcc aatgctcact ggcttccttg gggctaagggt	1260
aagtttcgat ttcctgtccc atgtaactgc ttttctgttc catatgcgct acttgagagt	1320
gtcccctgcc ctctttccct gcacaagccc tcccatgccc agcctaacac ctttccactt	1380

YEDA 023 PCT.ST25.txt

tctttgaaga gagtcttacc ctgtagccca ggggtggctgg gagctcacta tgtaggccag	1440
gttgggtccaa ctcacaggct atcctccac ctctgcctca taagagttgg ggttactggc	1500
atgcaccacc acaccagca tggtccttct cttttatagg attctccctc cttttttcta	1560
cctatgattc aactgtttcc aaatcaacaa gaaataaagt ttttaaccaa tgataaaaaa	1620
aaa	1623